ATTACHMENT A

PUBLIC HEARING DRAFT
STORMWATER MANAGEMENT ORDINANCE
AUGUST 28, 2009

22.10.155 – Stormwater Management [CZLUO 23.04.450]

A. Purpose. The purpose of this Section is to implement the Design Standards (Attachment 4) for the National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000004, as required by the Stormwater Management Plan for the County of San Luis Obispo. These standards are intended to address stormwater runoff from new development projects.

B. Applicability. All discretionary development, including projects requiring grading permit approval, that falls under one or more of the following categories are subject to the provisions of this Section. These categories are:

1. Single-family hillside residence(s) that involve any site work on slopes of 10 percent or greater

2. Regulated development (as defined by this Title – including multi-family residential, commercial, institutional, light industrial development, etc.) with 100,000 cumulative square feet or more of impervious area, including parking areas.

3. Auto and vehicle repair and services.

4. Automobile service stations and gas stations.

5. Restaurants.

6. Residential subdivisions with the potential for development of ten or more housing units. Secondary units are included in this calculation.

7. Parking lots and/or outdoor storage yards, when meeting one or more of the following thresholds:

a. Area is 5,000 square feet or greater; or

b. Number of parking spaces is 25 or greater.

Coastal Zone Land Use Ordinance – Add Subsection B.8

8. Where otherwise required by planning area standards.

C. Redevelopment. This Section shall not apply to redevelopment that results in an increase of less than fifty percent (50%) of the impervious surfaces of a previously existing development if the existing development was not subject to this Section. In this circumstance, this Section shall apply only to the addition, and not to the entire development.

D. Conflicts with other requirements. If conflicts occur between the General Permit and provisions of this Title, the more stringent standards shall control.

E. Application contents. In addition to those items required in Chapter 22.60[1] as part of a land use permit application and in Title 21 as part of a land division application, the application shall include all information necessary to demonstrate compliance with all applicable standards in this Section.

F. Certification. The application shall include certification of Best Management Practices (BMPs) by a qualified professional. A qualified professional shall mean a registered civil engineer, licensed architect, or other individual deemed to be qualified by the Director. In all cases, the qualified professional shall have been trained in the application of Best Management Practices (BMPs) not more than two years prior to the signature date by an organization with stormwater BMP design expertise (e.g. a university, American Society of Civil Engineers, American Society of Landscape Architects, American Public Works Association, or the California Water Environment Association).

G. General provisions.

1. **Stormwater Quality Plan (SWQP).** In order to demonstrate compliance with this Section, applicants shall complete an SWQP application. Best Management Practices (BMPs) shall be in compliance with the Low Impact Development (LID) Handbook.

2. **Conservation of natural areas.** A narrative description justifying the proposed site design shall be provided and shall address each of the following as applicable to the site:

   a. Concentrate or cluster development on portions of the site while leaving the remaining land in a natural undisturbed condition.

   b. Minimize clearing and grading of native vegetation to only the amount needed to establish the proposed use, allow access, and provide fire protection. Development shall avoid significant topographic features (steep slopes, ridgelines, bluffs, etc.) and areas of native vegetation to the maximum extent practicable.

   c. Maximize trees and other vegetation by planting additional vegetation, clustering tree areas, and promoting the use of native and/or drought tolerant plants.

   d. Promote natural vegetation by using parking lot islands and other landscaped areas.

   e. Preserve riparian areas and wetlands.

3. **Stormwater pollutants of concern.** Stormwater runoff from a site has the potential to contribute oil and grease, suspended solids, metals, gasoline, pesticides, and pathogens to the stormwater conveyance system. The development must be designed so as to minimize the introduction of pollutants that may result in significant impacts, generated from site runoff of directly connected impervious areas (DCIA), to the stormwater conveyance system as approved by the Building Official. In meeting this specific requirement, "minimization of the pollutants of concern" will require the incorporation of a BMP or combination of BMPs best suited to maximize the reduction of pollutant loadings in that runoff to the maximum extent practicable. Pollutants of concern consist of any pollutants that exhibit one or more of the following characteristics:

   a. Current loadings or historic deposits of the pollutant are impacting the beneficial uses of a receiving water.

[1] CZLUO reference: Chapter 23.02

b. Elevated levels of the pollutant are found in sediments of a receiving water and/or have the potential to bioaccumulate in organisms therein.

c. The detectable amounts of the pollutant are at concentrations or loads considered potentially toxic to humans and/or flora and fauna.

4. **Drainage plan required.** All projects subject to this Section shall require preparation of a Drainage Plan, pursuant to Section 22.52.110[2]. Post-development peak stormwater runoff discharge rates shall not exceed the estimated pre-development rate for developments where the increased peak stormwater discharge rate will result in increased potential for downstream erosion.

5. **Erosion and sedimentation control plan required.** All projects subject to this Section shall require the preparation of an erosion and sedimentation control plan pursuant to Section 22.52.120[3]. Project plans shall include both construction phase and long-term Best Management Practices (BMPs) consistent with this Title to decrease the potential of slopes and/or channels from eroding and impacting stormwater runoff, including the following:

   a. Safely convey runoff away from the tops of slopes and stabilize disturbed slopes.

   b. Maximize the use of use natural drainage systems.

   c. Stabilize permanent channel crossings.

   d. Vegetate slopes with native or drought tolerant vegetation.

   e. Install energy dissipaters (such as riprap) at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable specifications to minimize erosion. Approval of all agencies with jurisdiction (e.g. U.S. Army Corps of Engineers, California Department of Fish and Game, etc.) is required.

6. **Storm drain system marker.** Any project that includes construction or installation of new storm drain inlets shall include a highly visible storm drain marker designed in accordance with the Public Improvement Standards. Legibility of storm drain markers shall be maintained for the life of the project.

7. **Best Management Practice (BMP) maintenance.** Long-term maintenance of BMPs shall be established through the recordation of a mitigation agreement and/or Covenants, Conditions, and Restriction (CC&Rs), unless the project does not include structural or treatment control BMPs. In order to verify that BMPs will be maintained, the following measures shall be required:

   a. For all properties, the verification will include the developer's signed statement accepting responsibility for all structural and treatment control BMP maintenance until the time the property is transferred to a public entity and, where applicable, a signed agreement from the public entity assuming responsibility for structural or treatment control BMP maintenance.

[2] CZLUO reference: 23.05.040
[3] CZLUO reference: 23.05.042

b. The transfer of property to a private or public owner must have conditions requiring the recipient to assume responsibility for maintenance of any structural or treatment control BMP to be included in the sales or lease agreement for that property stating the owner's responsibility. The condition of transfer shall include a provision that the property owners conduct maintenance inspection of all structural or treatment control BMPs at least once a year and retain proof of inspection. For residential properties where the structural or treatment control BMPs are located within a common area which will be maintained by a homeowner's association, language regarding the responsibility for maintenance must be included in the project's Conditions, Covenants, and Restrictions (CC&Rs).

c. Printed educational materials shall be required to accompany the first deed transfer. These materials shall provide information on what stormwater management facilities are present, signs that maintenance is needed, how the necessary maintenance can be performed, and assistance that the applicant can provide to the new landowner. The transfer of this information shall also be required with any subsequent sale of the property.

d. If structural or treatment control BMPs are located within a public area proposed for transfer, they will be the responsibility of the developer until they are accepted for transfer by an appropriate public agency. Structural or treatment control BMPs proposed for transfer must meet Low Impact Design (LID) Handbook or other design standards adopted by the County for the BMP installed.

8. **Structural or treatment control Best Management Practices (BMPs).** Post-construction treatment control BMPs shall incorporate, at a minimum, either a volumetric or flow based treatment control design standard, or both, as identified below to mitigate (infiltrate, filter, or treat) stormwater runoff:

a. V**olumetric treatment control BMP.**

(1) The 85th percentile 24-hour runoff event determined as the maximized capture stormwater volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ ASCE Manual of Practice No. 87, (1998); or

(2) The volume of annual runoff based on unit basin storage water quality volume, to achieve 80 percent or more volume treatment by the method recommended in California Stormwater Best Management Practices Handbook – Industrial/ Commercial, (2003); or

(3) The volume of runoff produced from a historical-record based reference 24-hour rainfall criterion for "treatment" that achieves approximately the same reduction in pollutant loads achieved by the 85th percentile 24-hour runoff event.

b. Flow based treatment control BMP.

(1) The flow of runoff produced from a rain event equal to at least two times the 85th percentile hourly rainfall intensity for the area; or

(2) The flow of runoff produced from a rain event that will result in treatment of the same portion of runoff as treated using volumetric standards above.

c. Limited exclusion. Restaurants and automobile service stations/gas stations, where the land area for development or redevelopment is less than 5,000 square feet, are excluded from the numerical structural or treatment control BMP design standard requirement only.

9. **Hydromodification.** Projects shall comply with the County's hydromodification requirements, once developed and established in the Low Impact Development (LID) Handbook. Waiver of or modification to the hydromodification requirements may only be granted as specified in Subsection I.

H. Standards for specific uses.

1. **Outdoor material storage.** Where proposed projects include outdoor storage areas for storage of materials that may contribute pollutants to the stormwater conveyance system, the following structural or treatment Best Management Practices (BMPs) are required:

   a. Materials with the potential to contaminate stormwater must be:

      (1) placed in an enclosure such as, but not limited to, a cabinet, shed or similar structure that prevents contact with runoff or spillage to the stormwater system; or

      (2) protected by secondary containment structures, such as berms, dikes, or curbs.

   b. The material storage area shall be sufficiently impervious to contain leaks and spills.

   c. Where secondary containment is necessary, storage area shall have a roof or awning to minimize collection of stormwater or other approved method.

   d. For storage areas involving the storage of motor vehicles, site design shall comply with Section H.5.

2. **Regulated development.** Regulated development, as defined by this Title, includes, but is not limited to, multi-family, commercial, institutional, and light industrial developments. Regulated development with cumulative impervious square footage of 100,000 square feet or more is subject to the following requirements:

   a. Loading/unloading dock areas. To minimize the potential for material spills to be transported to the stormwater conveyance system, the following is required:

      (1) Loading docks areas shall be covered, or drainage shall be designed to minimize run-on or runoff of stormwater.

      (2) Connections to storm drains from depressed loading docks (truck wells) are prohibited. An approved structural source control measure and/or treatment control measure shall be used to prevent stormwater pollution.

   b. Repair/maintenance bays. To minimize the potential for oil/grease, car battery acid, coolant, and gasoline to be transported to the stormwater conveyance system, design plans for repair/maintenance bays shall include the following:

      (1) Repair/maintenance bays shall be indoors or designed in such a way that does not allow stormwater run-on or runoff.

      (2) The drainage system for the repair/maintenance bays shall be designed to capture all washwater, leaks, and spills. Drains shall be connected to a sump for collection and disposal. Direct connection to the storm drain system is prohibited. If required by the Regional Water Quality Control Board, an Industrial Waste Discharge Permit shall be obtained.

c. Vehicle/equipment wash areas. An area for washing/steam cleaning of vehicles and equipment shall be included on the plans. To minimize the potential for metals, oil/grease, solvents, phosphates, and suspended solids to be transported to the stormwater conveyance system, the area for washing/steam cleaning of vehicles and equipment shall be designed to the following specifications:

(1) Self-contained and/or covered, equipped with a clarifier, or other pre-treatment facility; and

(2) Properly connected to a sanitary sewer or other appropriately permitted disposal facility.

3. Restaurants. An area for washing/steam cleaning of equipment and accessories shall be included on the plans. To minimize the potential for metals, oil and grease, solvents, phosphates, and suspended solids to be transported to the stormwater conveyance system, the area for washing/steam cleaning of equipment and accessories shall be designed to the following specifications:

a. Self-contained, equipped with a grease trap, and properly connected to the sanitary sewer.

b. If the wash area is to be located outdoors, it must be covered, paved, have secondary containment, and be connected to the sanitary sewer or other appropriately permitted disposal facility.

4. Automobile service stations and gas stations. Automobile service stations and gas stations are subject to the following standards:

a. Fueling area. To minimize the potential for oil/grease, solvents, car battery acid, coolant, and gasoline to be transported to the stormwater conveyance system, the project plans shall include the following Best Management Practices (BMPs):

(1) The fuel dispensing area shall be covered with an overhanging roof structure or canopy. Provide containment limits on the plans (i.e. grade break, berm, etc.). The canopy's minimum dimensions shall be equal to or greater than the containment limits. The canopy shall not drain onto the fuel dispensing area, and the canopy downspouts shall be routed to prevent drainage across the fueling area.

(2) The fuel dispensing area must be paved with Portland cement concrete (or equivalent smooth impervious surface), and the use of asphalt concrete shall be prohibited.

(3) The fuel dispensing area must have a 2 percent minimum slope to prevent ponding, and must be separated from the rest of the site by a grade break that prevents run-on of stormwater to the maximum extent practicable.

(4) At a minimum, the concrete fuel dispensing area must extend 6.5 feet from the corner of each fuel dispenser, or the length at which the hose and nozzle assembly may be operated plus 1 foot, whichever is less.

b. Repair/maintenance bays. To minimize the potential for oil and grease, car battery acid, coolant, and gasoline to be transported to the stormwater conveyance system, design plans for shall comply with the provisions of Subsection H.2.b.

c. Vehicle/equipment wash areas. An area for washing/steam cleaning of vehicles and equipment shall be included on the plans, in compliance with the provisions of Subsection H.2.c.

d. Loading/unloading dock areas. To minimize the potential for material spills to be transported to the stormwater conveyance system, the project design shall comply with the provisions of Subsection H.2.a.

5. Parking lots. Parking lots with an area of 5,000 square feet or more, or 25 parking spaces or more, are subject to the following requirements:

a. Parking lot design. To minimize potential for heavy metals, oil/grease, and polycyclic aromatic hydrocarbons that are deposited on parking lot surfaces by motor vehicles from being transported to the stormwater conveyance system, parking lots shall be designed to meet the following criteria:

(1) Reduce impervious land coverage of parking areas to the maximum extent practicable.

(2) Infiltrate and/or treat runoff.

b. Oil contamination. To minimize potential for oil, grease, and other water insoluble hydrocarbons from vehicle drippings and leaks from entering the stormwater conveyance system, plans shall provide for the following:

(1) Treat to remove oil and petroleum hydrocarbons.

(2) Ensure adequate operation and maintenance of treatment systems, particularly sludge and oil removal and system fouling and plugging prevention control. At a minimum, this shall include a maintenance program which is funded and carried out by the property owner.

I. Modification or waiver. The standards of this Section may be modified or waived if impracticability for a specific property can be established. This may occur in one of two ways:

1. Modification or waiver by review authority. The applicable review authority may consider waiver or modification to the provisions of this Section only where the following findings can be made:

a. That all other structural or treatment Best Management Practices (BMPs) have been considered and rejected as infeasible; and

b. That adherence to these standards is impracticable for the project site because of one or more of the following reasons:

(1) Extreme limitations of space for treatment on a redevelopment project.

(2) Soil conditions at a site, which are unstable or unfavorable for infiltration.

(3) Risk of groundwater contamination because a known unconfined aquifer lies beneath the land less than 10 feet from the soil surface.

The Regional Water Quality Control Board may revoke a justification waiver for cause and with proper notice upon petition.

2. Modification or waiver by the Regional Water Quality Control Board. Any other justification for impracticability must be separately petitioned to the Regional Water Quality Control Board for consideration prior to project approval.

J. Enforcement. This Section may be enforced under the provisions established in Section 22.52.190 in addition to the enforcement procedures in Chapter 22.74[4].

[4] CZLUO References: 23.05.056; Chapter 23.10